

STN Columbus

***** Welcome to STN International *****

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG 06	CAS REGISTRY enhanced with new experimental property tags
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NEWS	6	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
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NEWS	16	OCT 19	BEILSTEIN updated with new compounds
NEWS	17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	18	NOV 19	WPIX enhanced with XML display format
NEWS	19	NOV 30	ICSD reloaded with enhancements
NEWS	20	DEC 04	LINPADOCDB now available on STN
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NEWS	23	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS	24	DEC 17	DGENE now includes more than 10 million sequences
NEWS	25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	26	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS	27	DEC 17	CA/Caplus enhanced with new custom IPC display formats
NEWS	28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	29	JAN 02	STN pricing information for 2008 now available
NEWS	30	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	31	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	32	JAN 28	MARPAT searching enhanced
NEWS	33	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	34	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	35	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	36	FEB 08	STN Express, Version 8.3, now available
NEWS	37	FEB 20	PCI now available as a replacement to DPCI

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
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NEWS IPC8	For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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***** STN Columbus *****

FILE 'HOME' ENTERED AT 09:46:34 ON 21 FEB 2008

=> fil reg; e pigment blue 15/cn

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 09:46:50 ON 21 FEB 2008

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STRUCTURE FILE UPDATES: 20 FEB 2008 HIGHEST RN 1004854-20-9

DICTIONARY FILE UPDATES: 20 FEB 2008 HIGHEST RN 1004854-20-9

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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E1      1      PIGMENT BLUE 10:6/CN
E2      1      PIGMENT BLUE 11/CN
E3      1 -->  PIGMENT BLUE 15/CN
E4      1      PIGMENT BLUE 151/CN
E5      1      PIGMENT BLUE 15:0/CN
E6      1      PIGMENT BLUE 15:1/CN
E7      1      PIGMENT BLUE 15:2/CN
E8      1      PIGMENT BLUE 15:3/CN
E9      1      PIGMENT BLUE 15:4/CN
E10     1      PIGMENT BLUE 15:6/CN
E11     1      PIGMENT BLUE 16/CN
E12     1      PIGMENT BLUE 16:4/CN
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=> s e3 or e7 or e8 or e9

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1 "PIGMENT BLUE 15"/CN
1 "PIGMENT BLUE 15:2"/CN
1 "PIGMENT BLUE 15:3"/CN
1 "PIGMENT BLUE 15:4"/CN
```

L1 1 PIGMENT BLUE 15"/CN OR "PIGMENT BLUE 15:2"/CN OR "PIGMENT BLUE 15:3"/CN OR "PIGMENT BLUE 15:4"/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN

RN 147-14-8 REGISTRY

ED Entered STN: 16 Nov 1984

CN Copper, [29H,31H-phthalocyaninato(2-)-KN29,KN30,KN31,.ka ppa.N32]-, (SP-4-1)- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 29H,31H-Phthalocyanine, copper complex

CN 29H,31H-Phthalocyanine, copper deriv.

OTHER NAMES:

CN (Phthalocyaninato)copper

CN α -Copper phthalocyanine

CN α -Copper phthalocyanine blue
 CN α -Phthalocyanine blue
 CN β -Copper phthalocyanine blue
 CN β -Phthalocyanine blue
 CN ϵ -Copper phthalocyanine
 CN 405D
 CN 7075M
 CN 79S26C
 CN 79S26C chip
 CN Accosperse Cyan Blue GT
 CN Acnalin Supra Blue G
 CN Acramin Blue F 3G
 CN Akrochem 626
 CN Aqualine Blue
 CN Aquis BW 3571
 CN Arlocyanine Blue PS
 CN Aztech Chemisperse Cyan 1541
 CN B 4G-KR
 CN B 702W
 CN B 705H
 CN B 736
 CN B 8M25
 CN Bahama Blue BC
 CN Bahama Blue BNC
 CN Bahama Blue Lake NCF
 CN Bahama Blue WD
 CN Bermuda Blue
 CN BFD 1121
 CN BGS 1
 CN BGSG-C
 CN BL 1531
 CN Blue 7110V
 CN Blue GLA
 CN Blue GLSM
 CN Blue Microdis
 CN Blue phthalocyanine α -form
 CN Blue pigment
 CN Blue Toner GTNF
 CN BRS 1
 CN BRX
 CN BT 4651
 CN C.I. 74160
 CN C.I. Pigment Blue 15
 CN C.I. Pigment Blue 15:1
 CN C.I. Pigment Blue 15:2
 CN C.I. Pigment Blue 15:3
 CN **Pigment Blue 15**
 CN **Pigment Blue 15:2**
 CN **Pigment Blue 15:3**
 CN **Pigment Blue 15:4**

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

DR 807622-86-2, 819860-69-0, 819860-85-0, 878390-73-9, 924902-00-1,
 12767-67-8, 10482-39-0, 11097-56-6, 11129-84-3, 177529-54-3, 177646-05-8,
 158853-86-2, 172308-31-5, 172826-46-9, 53802-06-5, 57916-96-8, 57425-52-2,
 55819-49-3, 59518-91-1, 59966-88-0, 64333-57-9, 95660-31-4, 95917-74-1,
 96024-35-0, 104921-99-5, 51331-32-9, 115284-42-9, 60880-51-5, 60937-79-3,
 61489-66-5, 61489-77-8, 61537-10-8, 109675-77-6, 109766-95-2, 66121-19-5,
 37223-81-7, 69431-77-2, 78170-27-1, 78413-59-9, 85255-95-4, 85256-77-5,
 92909-14-3, 90452-20-3, 34567-54-9, 39378-75-1, 39473-10-4, 53028-77-6,
 175386-67-1, 184007-78-1, 211564-97-5, 211925-80-3, 213190-86-4,
 244244-86-8, 345338-75-2, 392718-62-6

MF C32 H16 Cu N8

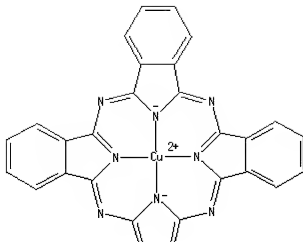
CI CCS, COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAOLD,
 CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM*,
 EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
 MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL,
 USPATOLD

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

16712 REFERENCES IN FILE CA (1907 TO DATE)
 1244 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 16769 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 134 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> fil stnguide
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
23.52	23.73

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 09:48:10 ON 21 FEB 2008
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FILE CONTAINS CURRENT INFORMATION.
 LAST RELOADED: Feb 15, 2008 (20080215/UP).

=> fil ca; s toner#; s ((carbon (w) black) (p) violet)
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.12	23.85

FULL ESTIMATED COST

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FILE COVERS 1907 - 14 Feb 2008 VOL 148 ISS 8
FILE LAST UPDATED: 14 Feb 2008 (20080214/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

L2 37632 TONER#

1301071 CARBON
266517 BLACK
71652 VIOLET

L3 168 ((CARBON (W) BLACK) (P) VIOLET)

=> s 12 and 13

L4 21 L2 AND L3

=> d kwic 1-21

L4 ANSWER 1 OF 21 CA COPYRIGHT 2008 ACS on STN

TI Novel **toner** compositions for black gravure inks for textiles, polymeric films, and papers

AB gravure inks is provided, particularly through the incorporation of certain polymeric colorants therein the gravure ink formulations. In addn., such **toner** additives provide a toning capabilities of **carbon black**-based gravure inks that provides jetter black appearances with lower degrees of redness and bronzing on various types of printing substrates than other **toner** formulations of std. alkali blue types of toning additives. Such printed substrates and methods of printing utilizing such novel gravure **toner** additives are also encompassed within this invention. Thus, a toluene-based ink was prepd. by admixing polymeric **violet** colorant ethoxylated propoxylated 2,2'-(3-methyl-4-(2-amino-4-methyl-3,5-dicyanothiophene)azo-phenyl-imino)bisethanol 15 parts, coated vanish 280 parts, Black Conc. (**carbon black**) 120 parts, and toluene 285 parts.

ST **toner** compn black gravure ink

IT Inks

(gravure; prodn. of **toner** compns. for black gravure inks for textiles, polymeric films, and papers)

IT Coloring materials

(polymeric; prodn. of **toner** compns. for black gravure inks for textiles, polymeric films, and papers)

IT Polyoxymethylenes, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(prodn. of **toner** compns. for black gravure inks for textiles, polymeric films, and papers)

IT Paper

Plastic films

Textiles

(substrate; prodn. of **toner** compns. for black gravure inks for textiles, polymeric films, and papers)

IT 515857-23-5

RL: TEM (Technical or engineered material use); USES (Uses)

(polymeric violet colorant; prodn. of **toner** compns. for black gravure inks for textiles, polymeric films, and papers)

L4 ANSWER 2 OF 21 CA COPYRIGHT 2008 ACS on STN

TI Electrostatographic developer containing methyl violet **toner**

AB The title developer **toner** contains a binder resin, a black coloring agent, a charge-controlling agent, and methyl violet **toner**. The

developer provides high-d. black images with less consumption. Thus, a mixt. of ZSR-1008 (acrylic acid-styrene copolymer), MA-100 Bontron S-34, and Fanal Violet R Supra was kneaded and pulverized to give a **toner**, which was blended with silica and ferrite carrier to give a developer.

ST electrostatog developer methyl **violet toner**; **carbon black toner**
methyl **violet**

IT **Carbon black**, uses
RL: USES (Uses)
(colorant, for electrophotog. developer **toner**, methyl **violet toner** for, less consumption in)

IT Electrophotographic developers
(**toners**, methyl violet for, with black colorant, less consumption in)

IT 138069-70-2, ZSR 1008
RL: USES (Uses)
(binder, for electrophotog. developer **toner**, methyl violet **toner** for, less consumption in)

IT 89107-32-4, Bontron S 34
RL: USES (Uses)
(charge-controlling agent, for electrophotog. developer **toner**, methyl violet **toner** for, less consumption in)

IT 1325-82-2, Fanal Violet R Supra
RL: USES (Uses)
(electrophotog. developer **toner** contg., with black colorant, less consumption in)

L4 ANSWER 3 OF 21 CA COPYRIGHT 2008 ACS on STN

AB . . . charged liq. electrophotog. developer with a transfer efficiency exceeding 85% and suited for printing and color proofing comprises a hydrocarbon, **toner** particles consisting of a resin and lacked C black particles, and a charge director, in which the hydrocarbon is a . . .

IT Printing, impact
Printing, nonimpact
(color proofing in, liq. electrophotog. developers with resin **toners** contg. lake carbon black particles for)

IT **Carbon black**, uses and miscellaneous
RL: USES (Uses)
(laked with crystal **violet**, liq. electrophotog. developers with resin **toners** contg., for printing and proofing)

IT Electrophotographic developers
(liq., **toners**, contg. laked carbon black particles for printing and proofing)

IT 548-62-9, Crystal **violet**
RL: USES (Uses)
(**carbon black** laked with, liq. electrophotog. developers with resin **toners** contg., for printing and proofing)

IT 18312-04-4, Zirconium octoate 134092-44-7, Lubrizol LZ 936
RL: USES (Uses)
(charged director, for liq. electrophotog. developers with resin **toners** contg. laked carbon black particles for printing and proofing)

IT 24937-78-8, Ethylene-vinylacetate copolymer 25053-53-6, Ethylene-methacrylic acid copolymer 104981-64-8, Elvax II 5720
RL: USES (Uses)
(**toners** contg. laked carbon black particles in, for liq. electrophotog. developers for printing and proofing)

L4 ANSWER 4 OF 21 CA COPYRIGHT 2008 ACS on STN

TI **Toners** for developing electrostatic images

AB **Toners** for developing electrostatic images contain (1) a graft polymer obtained by reacting 99.8-90 wt.% of a vinyl monomer with 0.2-10. . . multibasic acid contg. 5-90 wt.% of an unsatd. dibasic acid and a multivalent alc. and (2) a pos.-charging substance. The **toners** show good fixing and offset-preventing characteristics and are useful in electrophotog. Thus, an unsatd. polyester [prepd. by a reaction of . . . (1:2) adduct], styrene, and Bu acrylate were reacted to obtain a graft polymer. The graft polymer was mixed with methyl **violet**, **carbon black** (Mogul L), and low-melting polypropylene (Viscol 660P) to give a **toner**. The **toner** 5 and a carrier [composed of powdery Fe coated with a styrene-Me methacrylate (1:1) copolymer] 95 parts were mixed to. . .

ST electrophotog **toner** graft polymer; electrog **toner** graft polymer

IT **Carbon black**, uses and miscellaneous
 RL: USES (Uses)
 (electrophotog. **toner** contg. unsatd. polyester-grafted vinyl polymer, methyl **violet**, polypropylene and)

IT Electrophotography
 (**toners** for, contg. unsatd. polyester-grafted vinyl polymer and pos.-charging substance)

IT Photography, electro-, developers
 (**toners**, contg. unsatd. polyester-grafted vinyl polymer and pos.-charging substance)

IT 7439-89-6, uses and miscellaneous
 RL: USES (Uses)
 (carrier from copolymer-coated, for electrophotog. **toners** contg. **carbon black**, graft polymer and methyl **violet**)

IT 9003-07-0
 RL: USES (Uses)
 (electrophotog. **toner** contg. unsatd. polyester-grafted vinyl polymer, **carbon black**, methyl **violet** and)

IT 8004-87-3
 RL: USES (Uses)
 (electrophotog. **toner** contg. unsatd. polyester-grafted vinyl polymer, carbon black, polypropylene and)

IT 94901-09-4
 RL: USES (Uses)
 (graft, electrophotog. **toner** contg. **carbon black**, methyl **violet** and)

IT 25034-86-0
 RL: USES (Uses)
 (iron carrier coated with, for electrophotog. **toners** contg. **carbon black**, graft polymer and methyl **violet**)

L4 ANSWER 5 OF 21 CA COPYRIGHT 2008 ACS on STN
 AB . . . R1 = C8-18 alkyl) and a polyfunctional monomer in a polymer soln. in the above liq. The copolymers provide high-quality **toners** with good dispersibility and transferability. Thus, a copolymer was prepd. from a rosin-modified alkyd resin, lauryl methacrylate and ethylene glycol dimethacrylate in isooctane. **Carbon black**, crystal **violet** and isooctane were kneaded together with the copolymer to give a **toner** and then dispersed in an isoparaffin solvent to give an electrophotog. liq. developer. The developer exhibited high d. and good durability, and the **toner** had good storage stability.

L4 ANSWER 6 OF 21 CA COPYRIGHT 2008 ACS on STN
 TI Negative charge type **toner** for electrostatographic developing
 AB A neg. magenta **toner** composed of a binder resin contg. I (R = alkoxy, phenoxy; R1 = H, alkoxy, phenoxy) exhibits excellent triboelec. properties. . . image stability in successive copying. Thus, a developer comprised of a Fe powder (EFV 250/400, Nippon Fe Powder) and a **toner** contg. a polystyrene resin, **carbon black**, and Disperse **Violet** 31 gave a clear black image without stain and showed no deterioration after 104 copying cycles.

ST electrostatog neg **toner** binder; diaminoanthracenedione electrostatog neg **toner**

IT 9003-53-6 25085-34-1 25300-64-5
 RL: USES (Uses)
 (electrophotog. neg. **toner** binder resin compn. contg. diaminoanthracenedione deriv. and)

IT 6408-72-6
 RL: USES (Uses)
 (electrophotog. neg. **toner** binder resin compn. contg., for extended lifetime)

IT 509-34-2 87658-82-0
 RL: USES (Uses)
 (electrophotog. neg. **toner** contg.)

L4 ANSWER 7 OF 21 CA COPYRIGHT 2008 ACS on STN
 AB Pos. chargeable electrophotog. **toners** contain pigments, triphenylmethane deriv.-type basic dyes, and CO2H group-contg. polymers. Thus, Bu methacrylate-lauryl methacrylate-methacrylic acid copolymer (2.15:40:20 wt. ratio) 2, **carbon black** 10, methyl **violet** 1, and Spirit Nigrosine

2 g were dispersed in EtOH, and the dispersion was dried to give pos.-chargeable electrophotog. **toners**. The **toner** 10, lauryl methacrylate-methacrylic acid-styrene (70:10:20 mol ratio) copolymer 10, and Isopar H 50 g were mixed and dild. to give. . .

ST electrophotog **toner** developer liq
 IT Carbon black, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (electrophotog. **toners** contg., pos. chargeable)
 IT Photography, electro-, developers
 (liq., pos. chargeable **toners** for)
 IT 548-62-9 8004-87-3 9003-53-6 11099-03-9 12001-98-8 49736-70-1
 74242-10-7
 RL: TEM (Technical or engineered material use); USES (Uses)
 (electrophotog. **toners** contg., pos. chargeable)

L4 ANSWER 8 OF 21 CA COPYRIGHT 2008 ACS on STN
 AB . . . can be permeation-dyed with thermally transferable dyes, then electrostatic latent images are formed in the dielec. layer, developed with a **toner** contg. the thermally transferable dye, and heated to transfer the dye into the dielec. layer to give forgery-proof images with. . . latent images were recorded in the polyester layer by using an electorecording machine. The images were then developed with a **toner** consisting of polystyrene 80, **carbon black** 10, Sumikaron **Violet** 3BU 10, and a charge-controlling agent 1 part, and heated by using a 1000 W lamp to form forgery-proof images.

IT Electrophotography
 (toners contg. thermally transferable dyes for, for forgery-proof identification card imaging)
 IT Recording
 (electro-, **toners** contg. thermally transferable dyes for, for forgery-proof identification card imaging)
 IT 81-48-1 64553-76-0
 RL: TEM (Technical or engineered material use); USES (Uses)
 (electrostatog. **toners** contg., for dye permeation imaging on identification cards)

L4 ANSWER 9 OF 21 CA COPYRIGHT 2008 ACS on STN
 AB In carrying out multicolor electrophotog. process, a colored **toner** contg. a dye which decolors upon thermal reaction and another colored **toner** contg. a component which reacts with the dye in the 1st **toner** upon heating are used so that the color of overlapped area can be changed during the thermal fixing. Optionally, the 1st **toner** contains a compd. which forms a color upon thermal reaction and the 2nd **toner** contains a compd. which reacts with the color former in the 1st **toner** upon heating. The method is esp. useful for eliminating the color-mixing of the overlapped areas. Thus, a Se electrophotog. plate was exposed through a black-and-red original and a red filter, then developed by using a black **toner** consisting of styrene resin 100, **carbon black** 7, and crystal **violet** lactone 5 parts, and the **toner** images were transferred to a receptor paper. Subsequently, the Se plate was imagewise exposed without the filter, developed by using a **toner** consisting of styrene resin 100, Permanent Red F5R 7 and Bisphenol A 5 parts, and the red images were transferred. . . sheet, and the receptor sheet was heated to give a copy with pure black images and red images. When crystal **violet** lactone and Bisphenol A were not used, reddish-black images were obtained in the overlapped areas.

ST multicolor electrophotog process; color **toner** electrophotog
 IT 102-06-7B, reaction products with diacetoxylfluoran 596-09-8D, reaction products with diphenylguanidine 3564-21-4 5281-04-9 67340-41-4
 RL: USES (Uses)
 (electrophotog. color **toners** contg.)
 IT 80-05-7, uses and miscellaneous 1552-42-7
 RL: USES (Uses)
 (electrophotog. color **toners** contg., for automatic color correction)

L4 ANSWER 10 OF 21 CA COPYRIGHT 2008 ACS on STN
 TI Electrostatographic **toners**
 AB **Toner** constituent mixts. are made into a fluid, then the fluid is dot-printed on an appropriate support, and the **toner** dots are sepd. from the support to give electrostatog. **toner** powders. The method is suitable for prep. **toner** particles of the desired particle size. Thus,

carbon black 5, polystyrene 90, Sumikaron Violet RL 5, MePh 50, and MeCOET 50 parts were mixed to give a gravure ink, the ink was then used. . . halftone pos.; 40 μ depth), the dots were then removed from the support after dried well to give an electrostatog. **toner** whose particle size was ~10 μ .

ST electrophotog **toner**; electrostatog **toner**
 IT Photography, electro-, developers
 (toners for, prepn. of, by halftone printing technique)

L4 ANSWER 11 OF 21 CA COPYRIGHT 2008 ACS on STN
 AB . . . contg. a resin binder and a powd. photoconductor. After prepn. the plate is electrostatically charged, developed with a conductive magnetic **toner** composed of magnetite, **carbon black**, and a resin and having a sp. resistance of 1010-10 Ω /cm, fixed, and then mounted on a cylinder. After mounting the plate is then electrostatically developed with a **toner**, the **toner** then transferred to a receptor sheet, and subsequently fixed to give a finished plate. A detailed description of the app. is given along with the compn. of several conductive **toner** compns. Thus,, a typical photoconductive plate was prepd. by coating a 100 μ thick Al-coated polyester film with a ball-milled. . . contg. ZnO 100, a silicone 15, a cyclized rubber 5, Rose Bengal 0.01, and PhMe 100 parts. A typical conductive **toner** contained magnetite 35, **carbon black** 15, polystyrene 40, and Sumikaron Violet E-RL 20 parts.

IT Carbon black, uses and miscellaneous
 Epoxy resins, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (electrophotog. **toners** contg., for printing plate prepn.)

IT Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (microcryst., electrophotog. **toners** contg., for printing plate prepn.)

IT 1309-38-2, uses and miscellaneous 3860-63-7 9003-53-6 9011-14-7
 19286-75-0 24937-78-8 25068-38-6 64553-76-0
 RL: TEM (Technical or engineered material use); USES (Uses)
 (electrophotog. **toners** contg., for printing plate prepn.)

L4 ANSWER 12 OF 21 CA COPYRIGHT 2008 ACS on STN
 AB Electrostatic latent images formed in an org. photoconductor layer are developed by using elec. conductive **toners**, and the **toner** images are fixed by heating or hot-pressing to give a master plate for electrostatic printing. Thus, an electrophotog. paper prepd. with poly(N-vinylcarbazole) was charged, imagewise exposed, developed with a **toner** composed of magnetite 35, **carbon black** 15, polystyrene 40, and Sumikalon Violet 3RL 20 wt. parts, and the **toner** images were fixed by hot-pressing (at 150°) to give a master for electrostatic printing.

L4 ANSWER 13 OF 21 CA COPYRIGHT 2008 ACS on STN
 TI **Toner** powder for development of electrostatic images
 AB A **toner** for use in the magnetic brush development of latent electrostatic images consists of thermoplastic particles contg. a normal salt of. . . that are processed at ~140° over a long period of time. Thus, Piccoflex 120 (acrylonitrile-indene-styrene polymer) 576 g and Crystal Violet 2,4-di-tert-pentylphenoxyacetate 6 g were mixed for 60 min at 90-100°, **carbon black** 18 g added, and the mixing continued for 180 min at 90-100°, cooled, and milled to a **toner** size of 8-30 μ . The **toner** retained its blue color and all the **toner** particles had a pos. charge vs. the loss of the blue color and only 70% of the particles having a pos. charge for a **toner** contg. Crystal Violet stearate.

ST electrophotog **toner** basic dye salt
 IT Photography, electro-
 (developers for, **toners** contg. normal salts of basic dyes with org. acids for)

IT Epoxy resins
 Polyamides, uses and miscellaneous
 Polyesters, uses and miscellaneous
 RL: USES (Uses)
 (electrophotog. developer **toners** contg. normal salts of basic dyes with org. acids and)

IT Rosin
 RL: USES (Uses)
 (phenolic resins modified by, electrophotog. developer **toners**)

contg. normal salts of basic dyes with org. acids and)

IT Phenolic resins
RL: USES (Uses)
(rosin-modified, electrophotog. developer **toners** contg. normal salts of basic dyes with org. acids and)

IT 9003-53-6 12713-08-5 25068-38-6 29403-33-6 54066-07-8 54386-15-1
RL: USES (Uses)
(electrophotog. developer **toner** contg. normal salts of basic dyes with org. acids and)

IT 54023-46-0 54023-47-1 54023-48-2 54023-50-6 54023-51-7
54033-07-7 54058-41-2 54202-98-1 54202-99-2 57752-47-3
58013-94-8
RL: USES (Uses)
(electrophotog. developer **toner** contg. polymeric binder and)

IT 54023-40-4 54023-43-7 54023-45-9 58013-97-1
RL: USES (Uses)
(electrophotog. developer **toners** contg. polymeric binders and)

L4 ANSWER 14 OF 21 CA COPYRIGHT 2008 ACS on STN

AB . . . formed on an image recording sheet having a color-forming agent (or color-developing agent) in the surface layer by using a **toner** prep. by dispersing dye or pigment in a binder, then second electrophotog. images (colorless) are formed on the same sheet by using a **toner** dispersion contg. color developing (or color forming) agent, and the receptor sheet is heated to form colored images on the area without the 1st images. The multicolor images obtained by using this method are very clear, since the 1st **toner** image prevents the reaction of the color developing agent with the color-forming agent thereby eliminating the overlap of the different. . . was exposed through an original having black and blue images and through a blue filter, developed with a developer contg. **carbon black**-polystyrene **toner**, and the **toner** image was then transferred to a receptor sheet having a surface layer prep. from a mixt. of crystal **violet** lactone 1, poly(vinyl alc.) 2, and H2O 40 parts by wt. to form black images on the receptor sheet. The . . sheet was then recharged, exposed through the same original without the blue filter, developed with a developer contg. Bisphenol A-polystyrene **toner**, the **toner** image (colorless) transferred to the receptor sheet, and the sheet heated with ir radiation to form blue images in the. . .

IT Photography, electro-
(color, image overlap prevention in multicolor, process and **toner** developers for prevention of)

L4 ANSWER 15 OF 21 CA COPYRIGHT 2008 ACS on STN

AB . . . plate was exposed through an original having black and blue images to an incandescent lamp, then developed with a colorless **toner** contg. bisphenol A, the **toner** image was then transferred to a receptor sheet coated with Crystal **Violet** lactone-poly(vinyl alc.) mixt. to form blue images, the electrophotog. plate was reexposed through the same original and through a blue filter, then developed with a **toner** contg. **carbon black**, the black **toner** image was transferred to the receptor sheet, and the receptor sheet was then exposed to an ir radiation to remove. . .

L4 ANSWER 16 OF 21 CA COPYRIGHT 2008 ACS on STN

TI Electrophotographic sheets with electron acceptors and electrophotographic **toners** with electron donors

AB **Toner** powder contg. electron donor leuco dyes is adsorbed on the electrostatic latent image formed on an electrophotog. paper contg. electron. . . The use of a suitable donor-acceptor combination yields copies of desired color with superior image resolution than those from conventional **carbon black**-based **toners**. The use of the colorless **toners** also eliminates the usual smudging of papers with **carbon black**. Thus, p-phenylphenol-HCHO (1:0.7) copolymer 5, kaolin 18, (NaO3)6 0.1, poly(vinyl alc.) (d.p. = 1700) 1.2, Na alkybenzenesulfonate 0.6, butadiene-styrene latex. . . coated on electrophotog. paper to give a 11.5 g/m2 layer. After exposure, the paper was developed by an alkyl resin **toner** contg. Crystal **Violet** lactone (5%) and heated 3 sec at 150° to give a bright blue image.

ST electrophotog leuco dye **toner**

IT 1552-42-7
RL: USES (Uses)

(electrophotog. **toner** developer contg. alkyd resin and)

L4 ANSWER 17 OF 21 CA COPYRIGHT 2008 ACS ON STN

AB The dyes adsorbed on the **carbon black** of the electrophotog. developer dispersion are converted to pigments by forming lakes with metals or by oxidizing, and the pigments are used as the **toner** image forming agent in the liq. electrophotog. developer. The pigments are strongly adsorbed on carbon and thus yield better contrast, covering power, and color tone. Thus, calcined **carbon black** 140 g was added to a soln. contg. Methyl Violet BB (Hodogaya Chem.) in 300 ml H₂O + 100 ml MeOH. The mixt. was heated to 90° to remove MeOH, and added to 25 l. H₂O at 90° to disperse dye-impregnated **carbon black**. A mixt. contg. 1 l. H₂O, 35% NaOH 50, Na₂WO₄ (77% WO₃) 258, MoO₃ 30.5, acidic Na phosphate 15.2, 18.3%. . . . Z (Lion-Armour Co.) 15 g was added, stirred for 5-6 hr, and filtered after overnight settling to give 500 g **toner** pigments. The pigments 100, rosin 15, lauryl methacrylatemethacrylic acid copolymer 100, MePh 30, and Isopar H 400 g were mixed. . . .

ST **toner** pigment electrophotog developer; liq electrophotog developer

IT Photography, electro-
(liq. developers for, **toners** contg. dyes for)

IT 8004-87-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(oxidn. of, on carbon black particles, for electrophotog. **toner** manuf.)

L4 ANSWER 18 OF 21 CA COPYRIGHT 2008 ACS ON STN

AB A liq. developer for latent electrostatic images contains as **toner** a C pigment in a polar org. aliphatic solvent (C1-5 alc. or C3-10 ketone), the pigment being treated with a dye which can take a pos. electrostatic charge (nigrosine, methyl violet, or an alkali blue dye). The dyed pigment is preferably isolated and washed before being dispersed in the **toner** solvent which may also contain a resin (Me ester of hydrogenated colophony), a dispersant (methacrylate polymer in kerosine), a mineral oil, and a bonding agent [e.g. poly(vinyltoluene)]. The **toner** concn. is pref. 0.00002-0.02%. The particles can be fixed permanently to copying paper giving dense sharp copies with clean background. Mutual repellency prevents particle agglomeration. Thus, 20 g Nigrosine SSB is stirred with 40 g Mogul A **carbon black** in 200 ml EtOH (or EtCOMe), the solid filtered, dried, and powd. and 5 g of it ball-milled with 7. . . . g Rhohene L6/100 (linseed oil modified alkyd bonding agent) and 15 g Fusis A (high boiling aromatic solvent). This concd. **toner** is dispersed in a solvent (cyclohexane, CCl₄, etc.) to give a liq. developer contg. 0.0001-5% solids as desired.

IT 8005-02-5 11099-03-9

RL: USES (Uses)
(carbon black treated with, for **toners** in electrophotographic liq. developers)

L4 ANSWER 19 OF 21 CA COPYRIGHT 2008 ACS ON STN

AB . . . acetate copolymer (I) and 70-90% naturally occurring wax. The wax blends were combined with a paraffin wax, a mineral oil, **carbon black**, and a **toner** to provide pressure-transferable inks suitable for prep. C paper. Thus, 2 I waxes contg. 10 and 15% vinyl acetate and . . . 1:3 proportion. Comps. of wax blend 18.0, paraffin wax 30, mineral oil (113 Saybolt Universal sec. at 100°F.) 23, methyl violet base 1, **carbon black** 10, and china clay 18 parts were free of gelation tendencies and had viscosities within suitable ranges at the standard. . . .

L4 ANSWER 20 OF 21 CA COPYRIGHT 2008 ACS ON STN

AB . . . need for an addnl. control agent is eliminated. By eliminating the capsule of the control resin around the pigment, the **toners** are stable because there is no control resin to dissolve in the carrier liq. Pos. charged fixing agents are Pliolite. . . . ether). Pos. pigments are C.I. Pigments Blue 15, Green 8, Red 48, Red 38, Red 8, Red 5, Red 3, Violet 3, and Yellow 12, C.I. Solvents Black 5 and 13, leafed Al powder, ZnO, PbO, TiO₂, and lycopodium powder. Neg. . . . powder, and S. Pigments which can have either charge are C.I. Pigment Blue 15, MgO, Fe₂O₃, Co₃O₄, MnO, PbCrO₄, and **carbon black**. For example, Pliolite S5-B 2 g. was dissolved in 100 g. of toluene for the fixing soln. A hydrophobic **carbon black** offset ink (Offset Rocket Speed Black) 15 g. was dispersed in 100 g. of toluene. To 10 mL. of the. . . .

L4 ANSWER 21 OF 21 CA COPYRIGHT 2008 ACS on STN
 AB . . . a solvent. The ink contains this varnish 160, diethylene glycol
 10, petrolatum wax (125°F. m.p.) 4, iron blue 35, methyl violet
 20, carbon black toner 8, Ti 2, and 3 1/2% Co drier 5 parts.

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=> fil stnguide
COST IN U.S. DOLLARS                SINCE FILE      TOTAL
                                     ENTRY      SESSION
FULL ESTIMATED COST                47.35      71.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL
                                     ENTRY      SESSION
CA SUBSCRIBER PRICE                -15.75     -15.75
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=> fil ca; d bib 11 12 13 17; fil stnguide
COST IN U.S. DOLLARS                SINCE FILE      TOTAL
                                     ENTRY      SESSION
FULL ESTIMATED COST                0.30      71.50

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL
                                     ENTRY      SESSION
CA SUBSCRIBER PRICE                0.00     -15.75
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L4 ANSWER 11 OF 21 CA COPYRIGHT 2008 ACS on STN

Full Text

AN 90:46604 CA
 OREF 90:7365a, 7368a
 TI Dry surface printing plate
 IN Naganuma, Tsutomu; Hoshi, Hisao; Kumagai, Hiroji; Yoshida, Kaneki
 PA Toppan Printing Co., Ltd., Japan
 SO Ger. Offen., 38 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 2757837	A1	19780706	DE 1977-2757837	19771223
	DE 2757837	C2	19821118		
	JP 53079540	A	19780714	JP 1976-155474	19761223
	JP 54042204	A	19790404	JP 1977-108196	19770908
	JP 61000198	B	19860107		
	US 4175958	A	19791127	US 1977-862607	19771220
	GB 1598356	A	19810916	GB 1977-53034	19771220
	FR 2375637	A1	19780721	FR 1977-38881	19771222
	CA 1100566	A1	19810505	CA 1977-293784	19771222
	NL 7714302	A	19780627	NL 1977-14302	19771223
PRAI	JP 1976-155474	A	19761223		
	JP 1977-108196	A	19770908		

L4 ANSWER 12 OF 21 CA COPYRIGHT 2008 ACS on STN

Full Text

AN 89:207261 CA
 OREF 89:32065a,32068a
 TI Electrophotographic preparation of lithographic plates
 IN Naganuma, Tsutomu; Yoshida, Kaneki; Kumagai, Hiroji
 PA Toppan Printing Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 51110330	A	19760929	JP 1975-35773	19750325
PRAI	JP 1975-35773	A	19750325		

L4 ANSWER 13 OF 21 CA COPYRIGHT 2008 ACS on STN

Full Text

AN 84:24394 CA
 OREF 84:3963a,3966a
 TI **Toner** powder for development of electrostatic images
 IN Peters, Martinus Theodorus J.
 PA Oce-van der Grinten N. V., Neth.
 SO Ger. Offen., 21 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2450203	A1	19750424	DE 1974-2450203	19741023
	DE 2450203	B2	19790823		
	DE 2450203	C3	19800522		
	BE 806408	A2	19740423	BE 1973-136973	19731023
PRAI	BE 1973-136973	A	19731023		

L4 ANSWER 17 OF 21 CA COPYRIGHT 2008 ACS on STN

Full Text

AN 80:32505 CA
 OREF 80:5324h,5325a
 TI Liquid developer for electrophotographs
 IN Adachi, Shozo; Tamori, Masato
 PA Iwatsu Electric Co., Ltd.
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 48071237	A	19730927	JP 1972-3155	19711224
PRAI	JP 1972-3155	A	19711224		

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

FULL ESTIMATED COST	5.10	76.60
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
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